A LIST OF THE ANTS OF WASHINGTON STATE

(Hymenoptera, Formicidæ)

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Seventy-nine species, subspecies, and varieties of ants are included in the following list. Of these, two, Formica moki subsp. xerophila M. R. Smith and Leptothorax diversipilosis M. R. Smith, are new and recently described species. Those thirteen forms indicated by an asterisk are reported for the first time from Washington.

The geographic range of the ants has been indicated by letters in brackets after each specific name. Thus [E] refers to eastern Washington; [W] to western Washington; and [EW] to both regions. Initials have been substituted for most of the collectors' names, and these have been placed after the name of the locality as follows: (TK), Professor Trevor Kincaid; (Wheel), Professor W. M. Wheeler; (Mann), W. M. Mann; (FS), Falconer Smith.

Free use has been made of several important papers on the Washington formicifauna* and reference to these is necessary for information on the biology of the ants.

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SUBFAMILY PONERINÆ

1. Stigmatomma pallipes subsp. oregonense Wheeler. [W] Seattle (FS); Bothell, Olympia (TK).

SUBFAMILY MYRMICINÆ

- 2. Monomorium pharaonis L. [W] Seattle (TK).
- 3. Solenopsis geminata Fabr. "California to British Columbia" (Barret).
- 4. Solenopsis molesta Say. [EW] Pullman, Wawawai (Mann); Olympia, Tenino [TK]; Tacoma, Dry Falls, Vantage, Soap Lake (FS).

^{*}Mann, W. M. 1911. On some Western Ants and their Guests. Psyche, 8:493-514.

Wheeler, W. M. 1910. North American Ants of the Genus Camponotus. Ann. Acad. Sci., N. Y., 20:295-354. — 1913. Ants of the Genus Formica. Bull. Mus. Comp. Zool., Harvard, 53:390-565.

- 5. Solenopsis molesta var. validiuscula Emery. [E] Wawawai (Mann).
- 6. Pheidole californica subsp. oregonica Emery. [E] Almota, Pullman, Wawawai (Mann); Corfu, Vantage, Grand Coulee, White Bluffs, Dry Falls (FS).
- 7. Stenamma brevicorne subsp. [W] Bay Center (TK); San Juan Is. (FS).
- 8. Stenamma brevicorne subsp. diecki Emery.* [W] Bay Center (TK).
- 9. Stenamma nearcticum Mayr. [W] San Juan Is. (FS).
- 10. Aphænogaster subterranea subsp. occidentalis Emery. [EW] Almota (A. L. Melander); Pullman, Wawawai (Mann); Olympia (TK); Fort Lewis, San Juan Is., Cle Elum (FS).
- 11. Aphænogaster subterranea subsp. valida var. manni Wheeler. [E] Pullman (Mann).
- 12. Aphænogaster subterranea subsp. borealis Wheeler.* [W] Olympia (TK); San Juan Is. (FS).
- 13. Pogonomyrmex occidentalis Cress. [E] Wawawai (Mann); Spokane (TK); Dead Man's Lake (Adams County), Moses Lake, Stratford, Toppenish, Vantage (FS).
- 14. Myrmica mutica Emery. [EW] Ellensburg, Pullman (Mann); Olympia, Nisqually River (TK); Stuck River (FS).
- 15. Myrmica rubra subsp. brevinodis Emery.* [W] Chase Lake (King County) (FS); Chinook, Bay Center, Naselle River (TK).
- 16. Myrmica rubra subsp. brevinodis var. sulcinodoides Emery.*[W] Naselle River, Bay Center (TK); Nisqually River, San Juan Is., Stuck River (FS).
- 17. Myrmica rubra subsp. brevinodis var. subalpina Wheeler. [W] Orcas Island (Mann).
- 18. Myrmica scabrinodis var. sabuleti Meinert. [W] San Juan Is. (Mann).
- 19. Leptothorax acervorum subsp. canadensis Prov.* [W] Bay Center, Olympia (TK); Seattle, Garland Hot Springs (FS).
- 20. Leptothorax acervorum subsp. canadensis var. yankee Emery. [W] Seattle, San Juan Is. (FS).
- 21. Leptothorax curvispinosus subsp. rugatulus Emery.*[EW] Seattle (TK); Fort Lewis, Leavenworth, Cle Elum, San Juan Is., Dryden (FS).
- 22. Leptothorax nitens subsp. occidentalis Wheeler. [W] Friday Harbor (TK), (FS).

- 23. Leptothorax melanderi Wheeler. [E] Pullman (Mann).
- 24. Leptothorax eldoradensis Wheeler.* [EW] Cle Elum (FS); Rosario (TK).
- 25. Leptothorax diversipilosis M. R. Smith.* [W] Fort Lewis (FS).

SUBFAMILY DOLICHODERINÆ

- 26. Tapinoma sessile Say. [EW] Pullman, Ellensburg, Orcas Island (Mann); Almota (A. L. Melander); Rock Lake (Wheeler); Cle Elum, San Juan Is., Seattle, Olympia, Mt. Angeles, Sequim, Grand Coulee (FS).
- 27. Iridomyrmex analis Andre. [E] Wawawai (Mann).

SUBFAMILY FORMICINÆ

- 28. Brachymyrmex heeri subsp. depilis Emery.* [E] Grand Coulee (FS).
- 29. Lasius niger var. neoniger Emery. [EW] Union City (J.C. Bradley); Pullman (Mann); Bay Center, Chinook, Nellicota (TK); San Juan Is., Seaview, Skating Lake (FS).
- 30. Lasius niger var. americanus Emery. [EW] Orcas Island (Mann); San Juan Is., Seattle, Soap Lake (FS).
- 31. Lasius niger var. sitkaensis Perg. [EW] Pullman (Mann); Olympia, Bay Center (TK); Seattle, Bluitt Pass, Bothell, Fort Lewis, Mt. Rainier, Mt. Pilchuck, Neah Bay, San Juan Is., Seabeck, Stillaquamish River, Puyallup (FS).
- 32. Lasius brevicornis Emery. [E] Pullman (Mann); Cle Elum (FS).
- 33. Lasius interjectus Mayr. [E] Pullman (Mann).
- 34. Lasius latipes Walsh. [E] Pullman, Wawawai (Mann); Almota (A. L. Melander); Rock Lake (Wheeler).
- 35. Lasius claviger Roger.* [E] Grand Coulee (FS).
- 36. Formica manni Wheeler. [E] Kiona, Pullman, Wapato, Wawawai (Mann); Grand Coulee (FS).
- 37. Formica sanguinea subsp. subintegra Emery. [EW] Pullman (Mann); Olympia (TK).
- 38. Formica sanguinea subsp. subnuda Emery. [W] Seattle (Wheel.); San Juan Is., Mt. Pilchuck, Olympia, Garland Hot Springs (FS).
- 39. Formica sanguinea subsp. puberula Emery. [EW] Pullman (Mann); Olympia (TK).

- 40. Formica oreas var. comptula Wheeler. [EW] Pullman (Mann); San Juan Is. (FS).
- 41. Formica truncicola subsp. integra Nyl.* [EW] Cle Elum, Alder Creek (Chelan County), San Juan Is. (FS).
- 42. Formica truncicola subsp. integroides Emery.* [EW] Cle Elum, Yakima, Leavenworth, San Juan Is. (FS).
- 43. Formica truncicola subsp. integroides var. subclaviceps Wheeler. [W] San Juan Is. (Mann); Seattle (FS).
- 44. Formica truncicola subsp. integroides var. hæmorrhoidalis Emery. [E] Ellensburg (S. Henshaw).
- 45. Formica rufa subsp. obscuripes Forel. [EW] Pullman (Mann); Loon Lake (S. Henshaw); Rock Lake (A. L. Melander); San Juan Is., Grand Coulee (FS).
- 46. Formica rufa subsp. obscuripes var. melanotica Emery. [EW] Pullman (Mann); Olympia (TK); Tacoma, Fort Lewis, San Juan Is., Shelton, Seattle (FS).
- 47. Formica microgyna subsp. rasilis Wheeler. [W] Olympia (TK).
- 48. Formica fusca L. [EW] Pullman (Mann); Mt. Rainier (J. C. Bradley); San Juan Is. (Mann), (FS); Shaw Island, Bothell, Seattle, Paradise, Sequim, Tacoma, Olympic (FS), Labam (TK).
- 49. Formica fusca var. subsericea Say. [EW] Olympia (TK); Dry Falls, Tacoma (FS).
- 50. Formica fusca var. argentea Wheeler. [EW] Pullman, Wawawai (Mann); Yakima (S. Henshaw); Mt. Rainier, Seattle (Wheel.).
- 51. Formica fusca var. marcida Wheeler. [EW] Ellensburg, Kiona (Mann); Brinnon (J. C. Bradley); Soap Lake (FS).
- 52. Formica fusca var. subænescens Emery. [EW] San Juan Is. (Mann); Brinnon (J. C. Bradley); John Island, Cle Elum (FS).
- 53. Formica fusca var. gelida Wheeler. [EW] Olympic Mts. (J. C. Bradley); Toppenish, Leavenworth, Stratford, San Juan Is., Mt. Rainier, Orcas Is., Chase Lake (King County), Soap Lake (FS).
- 54. Formica fusca var. neorufibarbis Emery. [W] San Juan Is. (Mann); Union City, Mt. Rainier (J. C. Bradley); Olympia, Naselle River (TK); Bothell, Snoqualmie Falls, Granite Falls (FS).

- 55. Formica fusca var. neoclara Emery. [EW] Wawawai (Mann); Moses Lake, Goose Lake (FS); Olympia, Bay Center, North Bend, Nemah River (TK).
- 56. Formica fusca var. blanda Wheeler. [W] Olympia, Seattle (TK); Fort Lewis, Paradise (FS).
- 57. Formica fusca subsp. pruinosa Wheeler. [E] Wawawai (Mann).
- 58. Formica fusca var. lutescens Wheeler. [E] Ellensburg, Kiona, Wawawai (Mann).
- 59. Formica rufibarbis var. occidua Wheeler. [EW] Wawawai (Mann); Seattle (FS).
- 60. Formica subpolita Mayr. [EW] Orcas Is. (Mann); Vantage, Grand Coulee, San Juan Is., Tacoma (FS).
- 61. Formica subpolita var. camponoticeps Wheeler. [E] Rock Lake, Wawawai (Mann); Govan (J. A. Hyslop); Almota (A. L. Melander).
- 62. Formica subpolita var. picea Emery. [EW] Pullman (Mann); Grand Coulee, Seattle (FS).
- 63. Formica cinerea var. lepida Wheeler. [W] Seattle (TK) (FS); Sand River, Bay Center (TK); Garland Hot Springs, Stuck River (FS).
- 64. Formica neogagates Emery. [EW] Almota (A. L. Melander); Pullman, Wawawai (Mann); Soap Lake, San Juan Is. (FS).
- 65. Formica neogagates subsp. lasioides var. vetula Wheeler. [EW] Pullman (Mann); Olympia, Bay Center, San Juan Is. (TK).
- 66. Formica moki subsp. xerophila M. R. Smith.* [E] Leavenworth (FS).
- 67. Formica pallide-fulva subsp. schaufussi Mayr. [W] Seattle (TK) (FS).
- 68. Polyergus rufescens subsp. breviceps Emery. [E] Pullman (Mann).
- 69. Camponotus lævigatus Fred. Smith. [EW] Union City (J. C. Bradley); Seattle (TK); Bothell (FS).
- 70. Camponotus maculatus subsp. vicinus Mayr. [EW] Almota (A. L. Melander); Pullman, Grand Coulee (Mann); San Juan Is., Orcas Is., Shelton, Seattle (FS).
- 71. Camponotus maculatus subsp. vicinus var. nitidiventris Emery.* [EW] Nisqually River (TK); Cle Elum, Tacoma, San Juan Is., Soap Lake, Cashmere (FS).

- 72. Camponotus maculatus subsp. vicinus var. luteangulis Wheeler. [EW] Yakima River (S. Henshaw); Wawawai (Mann); Cle Elum, San Juan Is., Shelton (FS).
- 73. Camponotus maculatus subsp. vicinus var. plorabilis Wheeler. [EW] Almota (A. L. Melander); Ellensburg, Kiona, Pullman, San Juan Is. (Mann); Seattle (Wheel.).
- 74. Camponotus maculatus subsp. maccooki Forel. Washington (Osten Sacken).
- 75. Camponotus herculeanus subsp. pennsylvanicus De Geer. [W] San Juan Is (Mann).
- 76. Camponotus herculeanus subsp. pennsylvanicus var. whymperi Forel. [EW] Wenass, Spokane, Brinnon (Wheel.); Neppel (FS); Mt. Rainier (J. C. Bradley).
- 77. Camponotus herculeanus var. modoc Wheeler. [EW] Klikitat Valley (S. Henshaw); Pullman (C. V. Piper); Union City (J. C. Bradley); Olympia, Bay Center (TK); San Juan Is. (Mann) (FS); Park Forest Camp (Kittitas County), Maple Creek (Chelan County), Flowing Lake, Steven's Pass, Seattle (FS).
- 78. Camponotus herculeanus subsp. ligniperdus var. novæboracensis Fitch. [EW] Union City (J. C. Bradley); Nisqually River, Olympia (TK); San Juan Is., Seattle, Cle Elum (FS).
- 79. Camponotus caryæ (Fitch). [W] Washington (Wheel.); Olympia (TK).

THE MOSQUITO GENUS MANSONIA BLANCHARD IN CALIFORNIA

While studying material in the mosquito collection of the University of California the writer encountered four female specimens of *Mansonia perturbans* (Walker), a mosquito new to California. This is the first record of the genus *Mansonia* from California and greatly extends the known distribution of the species. Previously the species has been collected as far west as British Columbia, Montana, and the Mississippi Valley. The California specimens are from widely separated localities and were collected by Professor W. B. Herms, University of California, during the course of malaria mosquito surveys. The records are: Landers, Placer County, July 9, 1917; Galt, San Joaquin County, July 15, 1917; Holt, San Joaquin County, July 17, 1919; and Bakersfield, Kern County, July 28, 1919. The writer is indebted to Dr. Thomas H. G. Aitken for verification of his determination.—William C. Reeves.